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ABSTRACT

The difference between response modes of judgment versus choice has until recently gone largely unnoticed in the decision-making literature. Recent research suggests that judgment and choice are indeed not the same, and that the processes evoked by each differ radically. Using information search boards, this study followed the disclosure patterns of 52 undergraduate college students who were asked to either choose a hypothetical roommate, or make judgments on each roommate alternative. One-half of each group (choice and judgment) were randomly assigned to select either a roommate for themselves (personal relevance) or for a friend (non-personal relevance). Under non-personal relevance, the decision process for conditions of judgment versus choice was predicted to involve more information searched, less variability of the pattern of search, and greater use of interdimensional strategies. High relevance was predicted to attenuate these patterns. Analysis confirmed the predicted patterns for judgments as compared to choice. Unlike previous research, personal relevance yielded more intradimensional search patterns. (Author/ABL)

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The Effects of Response Mode and Personal Relevance On Information Search Strategies

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Abstract

Using information search boards, this study followed the disclosure patterns of 52 participants who were asked to either choose a hypothetical roommate, or make judgments on each roommate alternative. Half of each the choice and the judgment groups were randomly assigned to select either a roommate for themselves (personal relevance) or for a friend (non- personal relevance). Under non-personal relevance, the decision process for conditions of judgment verses choice was predicted to involve more information searched, less variability of the pattern of search, and greater use of interdimensional stratagies. High relevance was predicted to attenuate the above patterns. Analysis confirmed the predicted patterns for judgments as compared to choice. Unlike previous research, personal relevance yielded more intradimensional search patterns.

The Effects of Response Mode and Personal Relevance On Information Search Strategies

The present research systematically investigates the effects of response mode (judgment versus choice) and personal relevance on information search strategies. The difference between these specific response modes has until recently gone largely unnoticed in the decision-making literature. However, recent work by Billings and Scherer (in press) indicates that judgment and choice are indeed not the same, and that the processes evoked by each differ radically.

Drawing on the bidding and preference literature, Billings and Scherer have generated a number of logical hypotheses regarding behavior on information search boards. They suggest that judgment as compared to choice will result in more careful, systematic searches that proceed across character dimensions. That is: 1) more information searched; 2) a less variable pattern of search; and 3) an interdimensional search pattern (in press).

Furthermore, they propose that this pattern will be accentuated when the implications of the task are considered important.

Results of their study, using information search boards, support hypotheses for response mode, with judgment

leading to more information, less variability, and an interdimensional search. However, no major effects of level of importance was found. The authors suggest that this failure to confirm the role of importance was due to an inadequate manipulation of the variable.

The purpose of the current study is two-fold: first, to further establish the distinction of response mode (judgment-choice) on decision behavior. To consider this distinction stable, a conceptual replication is indicated. Secondly, a variation on the importance theme is offered. Previous research has proposed a relationship similar to that entertained by Billings and Scherer (in press). Specifically, decisions high in importance lead to a more careful search process. However, importance has often been operationalized in a distant and intangible fashion, with no conceivable ramifications for the individual making the decision. Examples include informing subjects that the results of the study they are participating in may be used by administrative bodies regarding policy (e.g., Billings and Scherer, in press; Chaiken, 1980, study 2), or by willingness to participate in behaviors of interest to the investigators (Gabrenya and Arkin, 1979).

But what of conditions which involve the individual on a more acutely personal level? Common sense indicates that

less complete and more idiosyncratic patterns would be employed when a decision is personally relevant in this manner. That is, when one is making a decision for oneself, affective based evaluations will be more likely to play a significant role in the search process. This leads to the initial selection and search of highly valued attributes more frequently than less valued ones, and earlier elimination of alternatives. In additon, the increased affective involvement may override the effects of response mode. Hence, the difference between judgment and choice will be attenuated under conditions of personal relevance.

Finally, Bettman (1981), has argued that decision making is moderated by experience. This study examines this possibility. Specifically, conditional effects will be more salient early in the pattern of search, but are modified as the selection progresses.

The hypotheses are as follows: 1) judgment, as compared to choice, will lead to more information searched, a less variable pattern of search and an interdimensional search pattern; 2) personal relevance when compared to nonpersonal relevance will result in less information searched, a more variable pattern of search, and an intradimensional search pattern; and finally, 3) an interaction, where the effect of response mode will be smaller for decisions that are

personally relevant.

Methods

Task

Information search boards (Payne, 1976) were utilized to present subjects with information regarding roommate characteristics. The boards consisted of eight possible alternatives listed vertically down the left side. Six dimensions upon which to base decisions were listed horizontally across the top of the board. Dimensions included Smoking, Personality, Musical Taste, Major Use of Room, Nonacademic Interests and Neatness. The values each dimension could assume were recorded on 3 x 5 cards, and contained in envelopes on the corresponding places on the board.

Three indices of decision behavior were created from this board: 1) the total amount of information used was measured by simply counting the number of cards examined; 2) variability of search was defined as the standard deviation of the number of pieces of information searched across alternatives; and 3) search pattern was indexed by the number of interdimensional moves minus the number of intradimensional ones, divided by the total amount of information used.

Procedure and Subjects

Fifty-two volunteer undergraduates participated in this study. Participants were informed of the nature of the study, given a standard introduction to the decision board, and subsequently administered task instructions. Participants were informed to take as much time as needed, and to use as little or as much of the information as they wished.

Manipulations

Response mode was manipulated by instructing subjects to evaluate each alternative on a 7 point scale in the judgment condition, and to choose only one alternative in the choice condition.

Personal relevance was manipulated by instructing subjects to choose or judge roommate alternatives for themselves. As opposed to this, the Nonpersonal relevance condition had subjects choose or judge roommates for an imagined friend with characteristics different from their own.

Results

A 2 x 2 ANOVA tested the hypothesis for each of the dependent variables. Response mode had significant effects

on total ($F=6.63$, $p<.01$) and variability ($F=8.55$, $p<.001$), but none for search pattern. However, all three measures were in the predicted directions (see Table 2 for means).

Relevance had no stable effects on total or variability, but did significantly effect search pattern ($F=4,25$, $p<.05$). As predicted, personal relevance resulted in an intradimensional search.

Insert Tables 1 and 2 about here

A second analysis addressed the temporal dimension by splitting the number of moves on each board in half, and testing for differences in search pattern. A significant overall effect was found, with subjects shifting from an intradimensional search pattern to an interdimensional one, regardless of condition ($F=7.1847$, $p<.01$).

Discussion

This study further establishes that response modes do effect decision making processes. In general, the patterns found here regarding response mode replicated those of Billings and Scherer (in press).

Perhaps the most provocative finding of this study is the effect of relevance on search pattern. As predicted personal relevance led to the use of intradimensional

strategies. Evidently, personally relevant decisions promote individuals to isolate important variables, and search them across alternatives. However, contrary to predictions, subjects did not use less information, or display a more variable search. Hence, while the pattern of search is altered, it is not necessarily less systematic.

Another major finding of this study involves the overall shift in search pattern. Regardless of condition, subjects had a tendency to move from an intra to an interdimensional search pattern. One explaination involves searching all alternatives on the most important dimension, and eliminating those that do not have satisfactory values on that dimension. Subjects will be more likely to search alternatives which manifested positive values in the intradimensional search. To accomplish this, there is a switch to interdimensional patterns. This is somewhat similar to Elimination by Aspects, a strategy first referred to by Tversky (1972), where the search begins with the most important dimension, but unlike here, proceeds intradimensionally. The difference between EBA and the switch reported here is that in the switch, search begins intradimensionally (like EBA), but proceeds interdimensionally.

In conclusion, it seems clear that the response mode

required and the type of decision can drastically alter the processes manifested in deliberation. Evidence suggests that relevance is indeed distinct from importance. The nature and degree of this difference demands continued attention. Experience with the task also appears to play a role in search stratagies. However, this exact relationship also remains unknown.

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Table 1
Analysis of Variance for Total, Variability and Search Pattern By Response and Relevance

Source of Variance	df	Dependent Variable MS	F
		Total	
Response	1	626.30	6.639**
Relevance	1	50.502	.535
Interaction	1	13.957	.148
Error	46	94.31	
		Variability	
Response	1	5.701	8.556***
Relevance	1	.370	.555
Interaction	1	.369	.554
Error	46	.666	
		Search Pattern	
Response	1	.333	1.286
Relevance	1	1.101	4.257*
Interaction	1	.007	.026
Error	46	.259	

* p<.05
** p<.01
*** p<.001

Table 2
Means for Significant Variables

Independent Variable	Dependent Variable: Total	Variability	Search Pattern
Response			
Choice	23.57	1.641	
Judgment	32.71	0.9579	
Relevance			
Choice			-.1525
Judgment			.2011

NOTE: For Search Pattern, positive values are equal to interdimensional patterns, and negative values to intradimensional ones.